

WHY HAVE SOCIO-ECONOMIC EXPLANATIONS BEEN FAVOURED OVER CULTURAL ONES IN EXPLAINING THE EXTENSIVE SPREAD OF HIV IN SOUTH AFRICA?

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The HIV prevalence in South Africa's various racial/ethnic groups differs by more than an order of magnitude. These differences are determined not by the lifetime number of sexual partners, but by how these partnerships are more likely to be arranged concurrently in African communities. The available evidence demonstrates that neither HIV nor concurrency rates are determined by socio-economic factors. Rather, high concurrency rates are maintained by a culturally sanctioned tolerance of concurrency. Why then do socio-economic explanations trump cultural ones in the South African HIV aetiological literature? In this article, we explore how three factors (a belief in monogamy as a universal norm, HIV's emergence in a time of the construction of non-racialism, and a simplified understanding of HIV epidemiology) have intersected to produce this bias and therefore continue to hinder the country's HIV prevention efforts.

'Whereas individual-level parameters may influence which individuals in a given population acquire infection, it is population-level parameters that affect the prevalence of infection.' Aral, Lipshutz, Blanchard (2007)¹

Sexually transmitted infections (STIs) are transmitted via sexual networks, and differences in the structure of these networks constitute the key population-level parameter that determines differences in HIV prevalence.¹ The differences in HIV prevalence between South Africa's racial/ethnic groups (19.9%, 3.2% and 0.5% for 15 - 49-year-old blacks, coloureds and whites respectively² are as big as those between the highest- and lowest-prevalence countries in the world. These large racial/ethnic differences are not related to individual level risk factors such as lifetime number of sexual partners, but are more likely determined by different sexual network structures.³ In African networks, sexual partnerships are more likely to be arranged concurrently, and this increases the interconnectedness of the sexual network in a non-linear fashion.³ Evidence from numerous sources and disciplines shows that these high concurrency rates are a key factor in driving high HIV transmission rates in southern and eastern Africa.⁴

Two main categories of factors have been advanced as being important in the promotion of these high concurrency rates: cultural and socio-economic factors. Socio-economic factors are unlikely to be the predominant determinants since neither HIV nor concurrency are contoured along the lines of poverty, at the level of countries or individuals. One of the few quantitative studies looking at the determinants of concurrency in South Africa found no relationship between income quintile and concurrency, but

concurrency was more commonly practiced and accepted in black communities than among whites and coloureds.⁵

A literature review of the explanations for the striking differences in HIV spread by race in South Africa concluded that there was a strong bias favouring socio-economic explanations.⁶ As an example, one of the premier textbooks on the epidemiology of HIV/AIDS in South Africa argues that the reason why HIV prevalence rates differ between races is that 'marginalisation and discrimination on the basis of race and/or ethnicity are key factors influencing vulnerability to HIV infection.'⁷ No evidence however was provided to back up this assertion. What is the explication for this bias? We argue that the playing down of cultural factors in the South African HIV aetiological literature is the result of an intersection of three factors.

EXPLAINING THE UNDER-APPRECIATION OF CULTURAL FACTORS

HIV'S EMERGENCE IN A TIME OF THE RESONANCE AND CONSTRUCTION OF NON-RACIALISM

The first factor relates to the post-apartheid context of the emergence of HIV. Notions of white racial and cultural superiority were central pillars of the apartheid ideology. An uncritical use of race as an analytical variable and on occasion frankly racist views would characterise much South African medical and public health enquiry during the apartheid period. HIV then emerged into prominence during the difficult period while South Africa was attempting to build a new dispensation based on non-racialism. Given this backdrop and the fact that HIV was sexually transmitted, deeply stigmatised and then found to disproportionately affect

black South Africans, it is not difficult to see why many of the investigating experts downplayed the racial differentials in HIV spread and biased their assessments of aetiology towards socioeconomic factors. To have suggested that culturally backed norms were important in HIV spread might well have been construed as racist. An example of the ongoing reluctance to use race or ethnicity as an analytical variable in regard to HIV in South Africa, is the 2008 Human Sciences Research Council HIV Survey. Despite it being South Africa's only nationally representative HIV-serolinked survey, it does not mention racial differentials in HIV rates anywhere except in one small table in the appendix.⁸

MONOGAMY AS A UNIVERSAL NORM

The second factor derives from the unacknowledged post-Christian ethical foundation of much of the South African HIV epidemiology. One dimension of this is the subtle way that monogamy (either lifetime or serial) is assumed to be normative for all humans. Little consideration is given to the wealth of anthropological and historical evidence as to the normative nature of polygamy in stratified societies across place and time,⁹ and more pertinently, the fact that polygamy is still far more widely acceptable in sub-Saharan Africa than elsewhere in the world.¹⁰ The spread of Christianity in South Africa led to the suppression of polygamy. The historical record is clear that this did not lead to a reduction in the total number of concurrent partners, but only to the non-main partners being kept secret.¹¹ Having main and more or less secret-extra partners is still widely practised and tolerated in the region. Authors who have provided evidence that these high concurrency rates lead to high-risk sexual networks in the region have, however, been portrayed as racist and 'crypto-racist'.¹² If these authors label as racist the argument that monogamy is less prevalent in parts of Africa, then it necessarily follows that these authors regard monogamy as more ethical. Even if this belief in mononormativity exists at a fairly subliminal level, then

the cultural explanation for generalised HIV epidemics in Africa may clash with one's principles of non-racialism – one is stating that Africans are more likely to engage in unethical behaviour. Given that mononormativity is protected by its unacknowledged status, this clash should lead to the triumph of the commitment to non-racialism. The theory of cognitive dissonance predicts that given this scenario the mind should then actively search for other theories, such as socio-economic and biological ones, to explain the higher HIV prevalences in Africa (see Fig. 1).

POORLY DEVELOPED CONCEPTUAL FRAMEWORK FOR HIV SPREAD

High-risk networks characterised by high concurrency rates are now recognized to be key to the generation of generalised HIV epidemics. Evaluating the strength of these network level effects requires network-level analyses. One of the most dramatic limitations of much of the aetiological literature on HIV epidemiology in South Africa, is the absence of network levels of analysis. A recent example is a study that compared individual level sexual behaviours between South African and United States youth surveys.¹³ Based on little difference between these parameters in the two countries the authors conclude that differences in sexual behaviour are unlikely to explain South Africa's generalised HIV epidemic. They ignore network level factors in their analysis and the literature which shows that network level factors are able to explain the magnitude and patterning of South Africa's epidemic.³ The conclusions of the paper and the accompanying editorial¹⁴ are that HIV prevention efforts need to shift away from focussing on sexual behaviour and the norms which underpin these, and instead campaign for conditional cash transfers and a range of biological measures of proven efficacy for HIV prevention.

TECHNICAL INTERVENTIONS AS THE NEW PANACEA FOR HIV PREVENTION

In the absence of a national consensus ever having been attained that a culturally sanctioned norm is driving HIV-spread in the

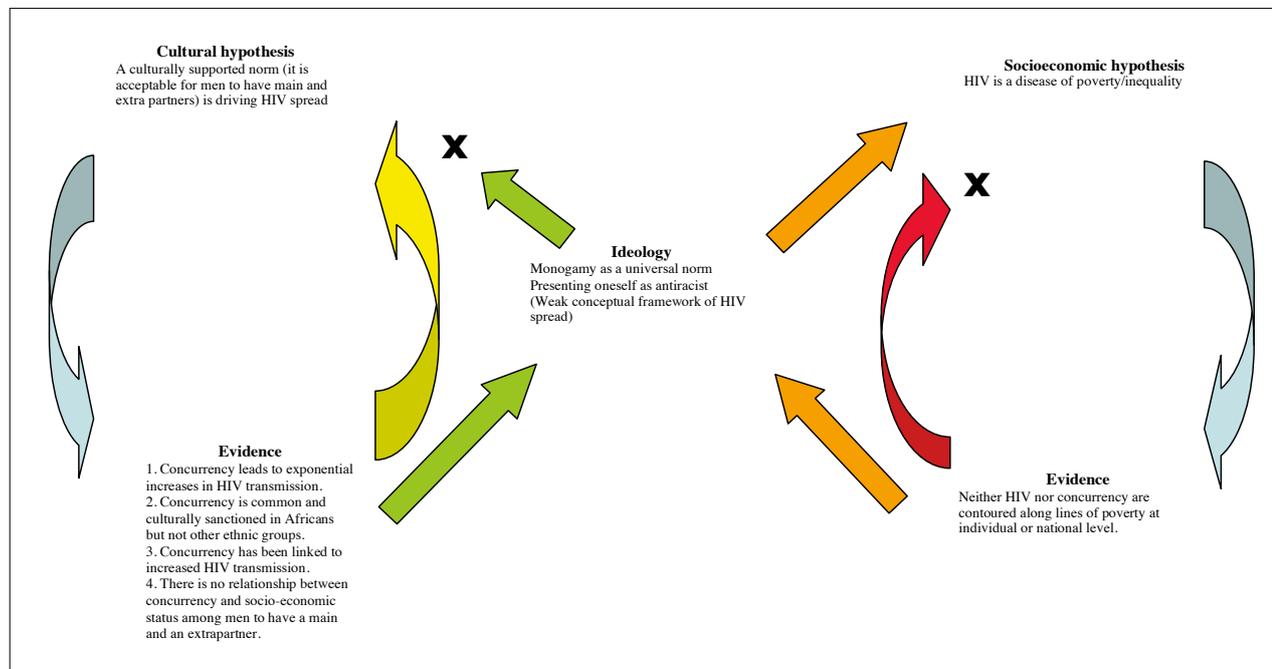


Fig. 1. The cognitive processes involved in evaluating two competing theories for why HIV has spread so extensively in some racial groups in South Africa. As illustrated here, the lack of evidence to support the socio-economic thesis should lead to its dismissal (red arrow), while the validity of the evidence to support the cultural hypothesis should serve to strengthen it as an explanatory cognition (yellow arrow). In the setting of the strong ideologies of class-determinism and monogamy-as-a-universal norm and the anchor cognition of wanting to present oneself as antiracist, however, the cultural thesis generates considerable cognitive dissonance (one is implying that Africans are more likely to engage in unethical behaviour), and the theory is therefore rejected (green arrows). Likewise, if one is sufficiently committed to class as the explanation for differing HIV rates, then the dissonance produced by the lack of evidence to back one's ideologically determined theory up can be reduced by the selective interpretation of evidence to back it up (orange arrows).

country, the majority of contemporary papers on HIV prevention in South Africa continue to focus on socio-economic and technical inventions. The currently favoured interventions include vaginal microbicides, Test-and-Treat, increased condom usage or STI vaccines.¹³⁻¹⁵ Some argue against behaviour change campaigns owing to their futility,¹⁴ while others argue that further research on this topic is immoral.¹⁶ One prominent paper that does mention dealing with high concurrency rates (albeit as one of a long list of factors) goes on to state that conditions created by apartheid were responsible for the genesis and maintenance of high concurrency rates.¹⁵ The authors then claim that South Africa's HIV Strategic Plan 'is comprehensive' and 'highlights that South Africa is not deficient in policy' (p. 926). Unfortunately, this national plan does not mention the urgency of dealing with concurrency. In fact there is still little more than a few small ad hoc programmes in South Africa to effect the mass social mobilisation necessary to lead to norm and behaviour change in this regard.

CONCLUSION

The key to Uganda's success in rapidly bringing down HIV rates was the way Uganda fairly rapidly recognised the importance of encouraging 'zero grazing' or reducing extra partners.¹⁷ Unfortunately, HIV is still viewed by too many in South Africa as being a disease of poverty and inequality. Where concurrency is acknowledged to be important, it is too often regarded as being driven by socio-economic factors. The net effect has been that insufficient focus and research has been directed at the normative cultural factors that sustain the high concurrency rates in South Africa. As a result, there has not been the same pressure brought

to bear on effecting the necessary changes in tolerance of extra partners in South Africa as has been the case in Uganda.

REFERENCES

1. Aral S, Lipshutz J, Blanchard J. Drivers of STD/HIV epidemiology and the timing and targets of STD/HIV prevention. *Sex Transm Infect* 2007;83 (s1):1-4.
2. Shisana O, Rehle T, Simbayi L, Parker W, Zuma K. South African National HIV Prevalence, HIV incidence, Behaviour and Communication Survey. Pretoria: HSRC Press, 2005:90-92.
3. Kenyon C, Dlamini S, Boule A, White R, Badri M. A network-level explanation for the differences in HIV prevalence in South Africa's racial/ethnic groups. *African Journal of AIDS Research* 2009;8:243-254.
4. Mah T, Shelton J. Concurrency revisited: increasing and compelling epidemiological evidence. *Journal of the International AIDS Society* 2011;14:33-39.
5. Kenyon C, Boule A, Badri M, Asselman V. 'I don't use a condom [with my regular partner] because I know that I'm faithful, but with everyone else I do': The cultural and socioeconomic determinants of sexual partner concurrency in young South Africans. *Journal of Social Aspects of HIV/AIDS* 2010;7:35-43.
6. Kenyon C. "Differential poverty rates are responsible for the racial differentials in HIV prevalence in South Africa"; an enduring and dangerous epidemiological urban legend? *Southern African Journal of HIV Medicine* 2010;11:22-27.
7. Gouws E, Abdool Karim Q. HIV Infection in South Africa: the Evolving Epidemic. In: Abdool Karim SS. *HIV/AIDS in South Africa*. Cambridge: Cambridge University Press, 2005:63.
8. Shisana O, Rehle T, Simbayi L, Zuma K, Jooste S. South African National HIV Prevalence, Incidence, Behaviour and Communication Survey 2008: A Turning Tide among Teenagers? Pretoria: HSRC Press, 2009.
9. Macdonald K. The establishment and maintenance of socially imposed monogamy in western Europe. *Politics and the Life Sciences* 1995;14:3-23.
10. Cleland J, Scott C, Whitelegge D. *The World Fertility Survey: An Assessment*. Oxford: Clarendon Press, 1987.
11. Delius P, Glaser C. The myths of polygamy: a history of extra-marital and multi-partnership sex in South Africa. *South African Historical Journal* 2004;50:84-114.
12. Stillwaggon E. Racial metaphors: Interpreting Sex and AIDS in Africa. *Development and Change* 2003;35:809-832.
13. Pettifor A, Levandowski B, Macphail C, Miller W, Tabor J. A tale of two countries: rethinking sexual risk for HIV among young people in South Africa and the United States. *J Adolesc Health* 2011; 49:237-243.
14. Jaspán H. The wrong place at the wrong time: geographic disparities in young people's HIV Risk. *J Adolesc Health* 2011;49:227-229.
15. Abdool Karim S, Churchyard G, Abdool Karim Q, Lawn S. HIV infection and tuberculosis in South Africa: an urgent need to escalate the public health response. *Lancet* 2009;374:921-933.
16. Sowers L, Stillwaggon E. Concurrent sexual partnerships do not explain the HIV epidemics in Africa: a systematic review of the evidence. *Journal of the International AIDS Society* 2010;13:34.
17. Kirby D. Changes in sexual behaviour leading to the decline in the prevalence of HIV in Uganda: confirmation from multiple sources of evidence. *Sex Transm Infect* 2008;84 (supplement 2):ii35-ii41.